

DRAFT WORKING PAPER

Hispanics in Agriculture and Opportunities for Resource Conservation

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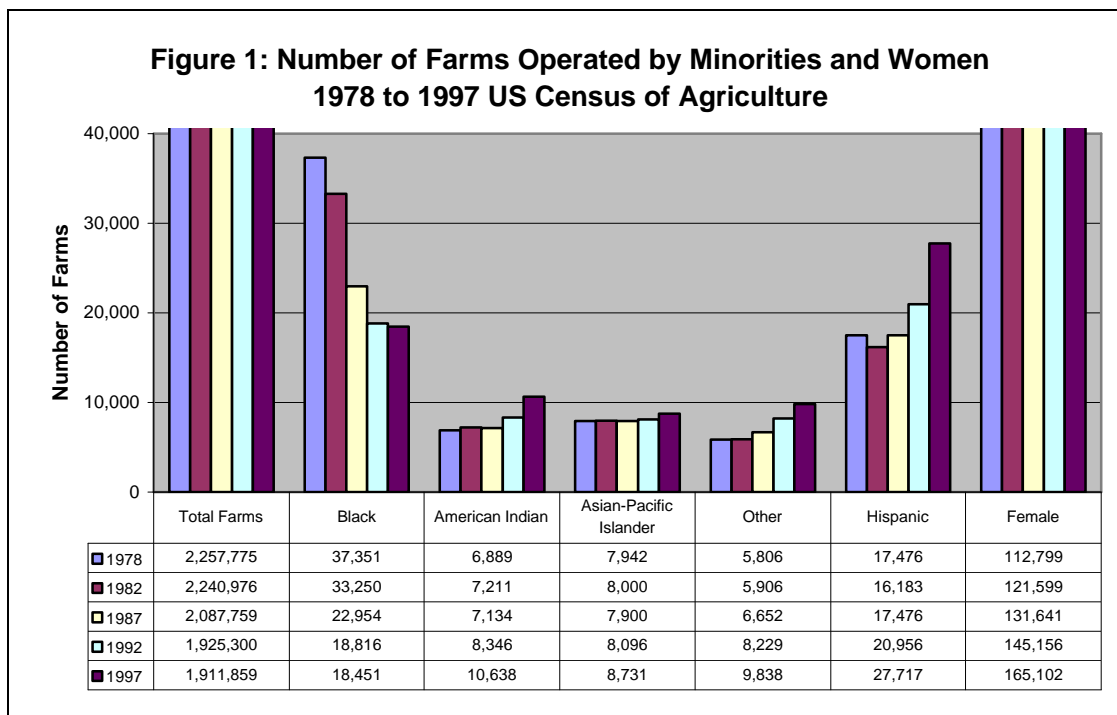
Hispanics in Agriculture and Opportunities for Resource Conservation¹

David Buland² and Fen C. Hunt³

I. Background

The Natural Resources Conservation Service (NRCS) provides technical assistance and implements cost-sharing conservation programs to assist farm operators and landowners in carrying out voluntary conservation practices for the long-term sustainability of the nation's natural resources and environment. To promote natural resources conservation, the agency can tailor policies and marketing strategies to match the needs of farmers and landowners who receive the assistance. To facilitate the development of technology transfer systems, one key element is to have a better understanding of the recipient's characteristics, social, and economic conditions, especially non-traditional groups, in order to be effective in carrying out conservation policies.

Among various non-traditional groups, the number of Hispanic farms has increased the most in the last decade (see Figure 1), spreading throughout the entire country. The significant increase of this group of farm operators presents an opportunity for NRCS to evaluate the current conservation policies and marketing strategies so as to increase outreach to this particular group.



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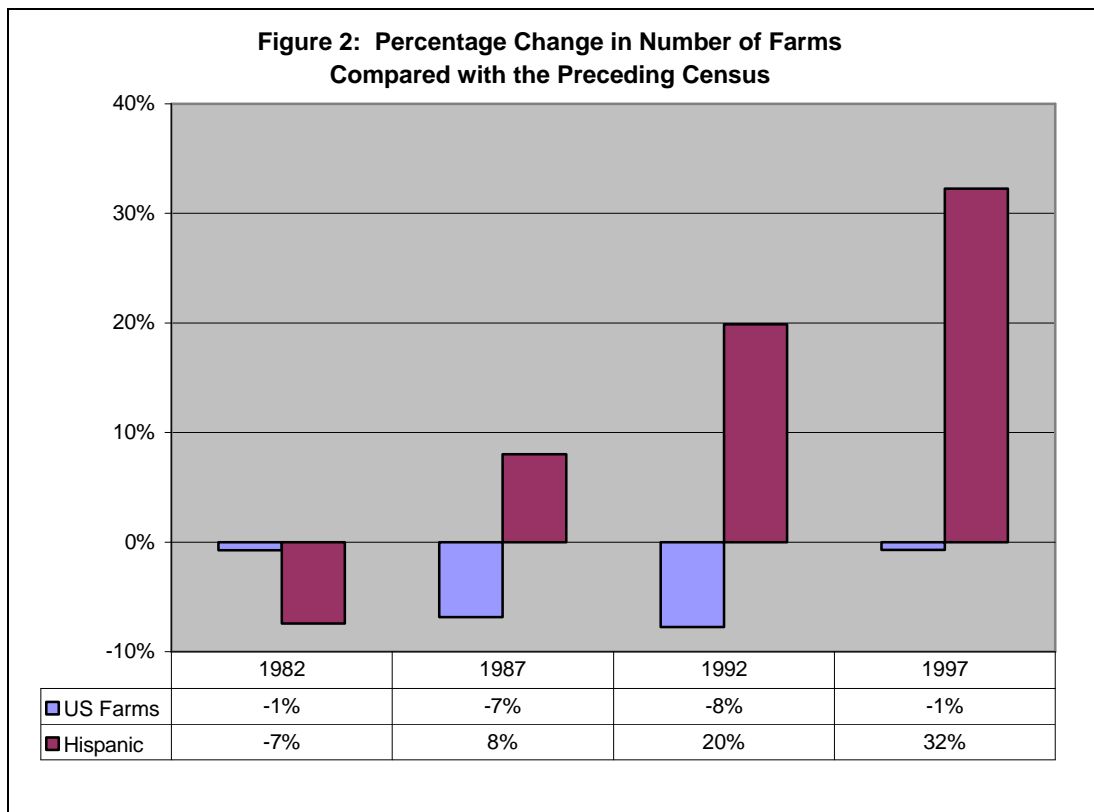
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This paper intends to give an overview of the Hispanic farm operators' characteristics, social, and economic conditions. The objective of this paper is to raise the awareness of some major changes that Hispanic farm operators have in the last decade and the opportunity that NRCS has to promote conservation within this ethnic group.

No primary data were collected for this paper. Rather, analyses were based on secondary data, including those of the Census of Agriculture (hereafter referred to as "Census") from various years, and NRCS Performance and Results Measurement System (PRMS). This paper does not address data efficacy issue.

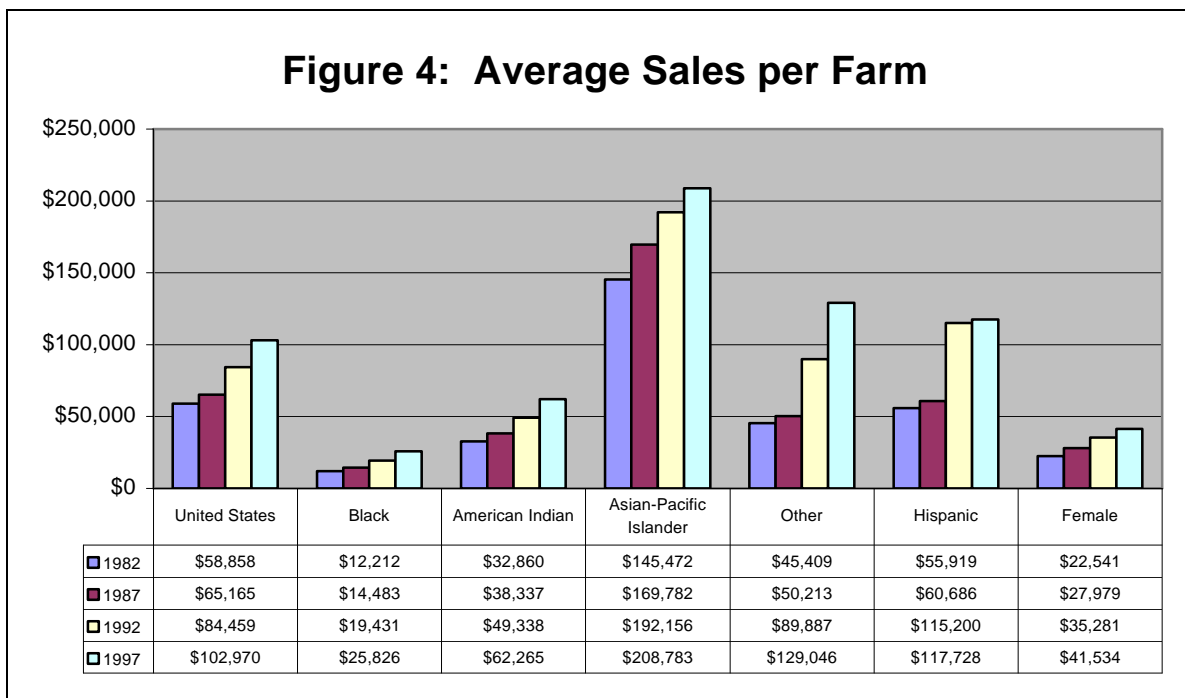
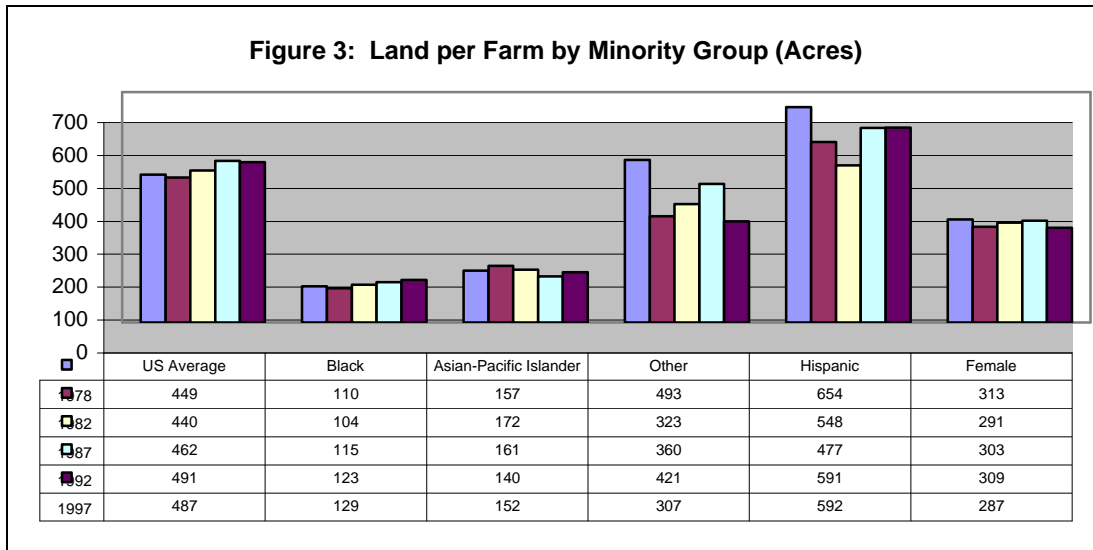
II. General Overview of Hispanic Farm Operators

Number of farms: According to the Census, the total number of farms in the United States declined by 14.7 percent, from 2.2 million to 1.9 million farms, between 1982 and 1997. However, the number of Hispanic farms during the same period increased by 71.3 percent, from 16,183 to 27,717 farms. Figure 2 reveals the changes of these two groups when compared with the number of farms from that of the previous Census.



Size and sales per farm: Historically, average acres per farm operated by Hispanic farms are slightly higher than that of the U.S. average, and much higher than most other minority groups. In 1997, Hispanic-run farms had an average of 592 acres, while U.S.

farms averaged 487 acres (Figure 3.) (Native American farm acreages are not comparable because of the mixture of reservation land.) Compared with U.S. farms where average sales increased from \$59,000 to \$103,000 from 1982 to 1997, Hispanic-run farms had a greater increase from \$56,000 to \$118,000 (see Figure 4.)



Looking at the mix of large and small farms with combined government payments and sales, Table 1 shows that Hispanics have a higher proportion of both very large and very small farms than that of the U.S. Thirty-two percent of Hispanic farms have total sales and government payments under \$2,500. On the other hand, 2% of Hispanic farms had

sales over \$1,000,000, compared with 1.4% of all U.S. farms. The high average sales for Hispanics result from a relatively small number of farms with large sales.

Table 1

US and Hispanic Farms by Combined Government Payments and Market Value of Agricultural Sales, 1997 Ag. Census					
Max. Value of Sales	Number of Farms		Percent of Farms		
	US	Hispanic	US	Hispanic	
\$ 1,000	195,344	4,610	10%	17%	
\$ 2,500	237,793	4,158	12%	15%	
\$ 5,000	245,256	3,777	13%	14%	
\$ 10,000	254,046	3,554	13%	13%	
\$ 25,000	286,849	3,592	15%	13%	
\$ 50,000	175,282	2,150	9%	8%	
\$ 100,000	161,582	1,791	8%	6%	
\$ 250,000	193,068	1,926	10%	7%	
\$ 500,000	91,528	1,030	5%	4%	
\$ 1,000,000	44,626	584	2%	2%	
Over \$1,000,000	26,485	545	1.4%	2.0%	
Total	1,911,859	27,717	100%	100%	

Farm operator characteristics: In 1997, about half of Hispanic farm operators reported farming as their principal occupation, only one percent lower than that of the U.S. Between 1982 and 1997, over six thousand more Hispanics became full-time farmers while the number of full-time farmers in the US dropped by 273,000. The average age of Hispanic farm operators (54 years old in 1997) was similar to that of the U.S. (see Figure 6.) Identical to the general farm population, most Hispanic farm operators under 25 and over 65 listed farming as their primary occupation. In every other age category, i.e. between 25 and 65, most Hispanic and non-Hispanic farmers listed another occupation as their principal occupation.

Figure 5: Operators listing Farming as their Principal Occupation

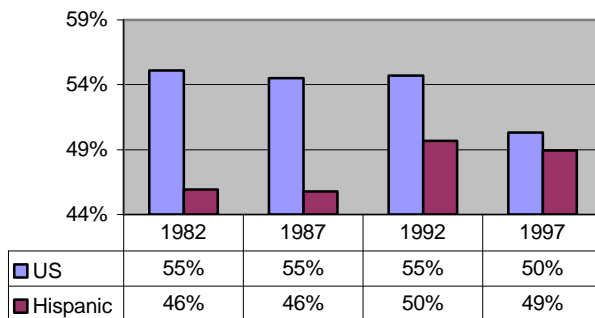
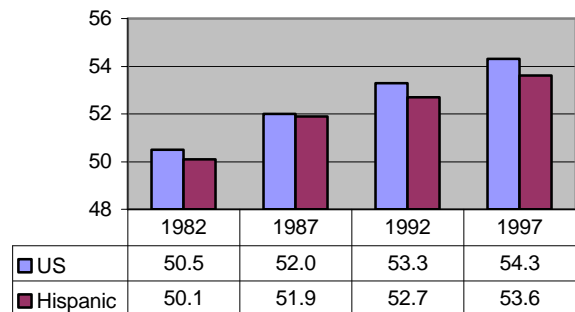


Figure 6: Average Age of US and Hispanic Farmers



Census data also shows that 37% of Hispanics live off the farm, compared with only 29% of all US farmers. The lower percentage of Hispanics living on the farm makes it difficult for USDA employees to contact and work with Hispanic farmers directly on their land.

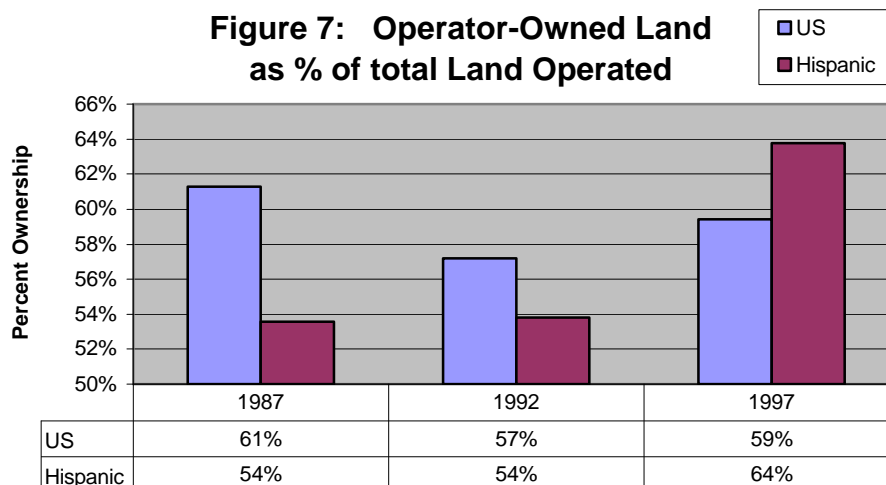
In addition, Census reveals that average years of Hispanic farm operators on the present farm were 3.5 years less than that for U.S. farm operators, 16.6 years for Hispanics compared to 20.1 years for other farmers. The average number of years on the present farm increased by three years for both Hispanics and non-Hispanics since 1982. However, Hispanics on the present farm for more than 10 years increased substantially (more than doubled), while that of the U.S. increased only 1 percent. Moreover, the number of Hispanic farm operators with less than 5 years on the present farm rose 32%, while the total number of operators in that category declined by 31%. This indicates that many Hispanic farmers have not been on the farm long enough to obtain a long-term relationships with their USDA service personnel.

Table 2 Years on Present Farm

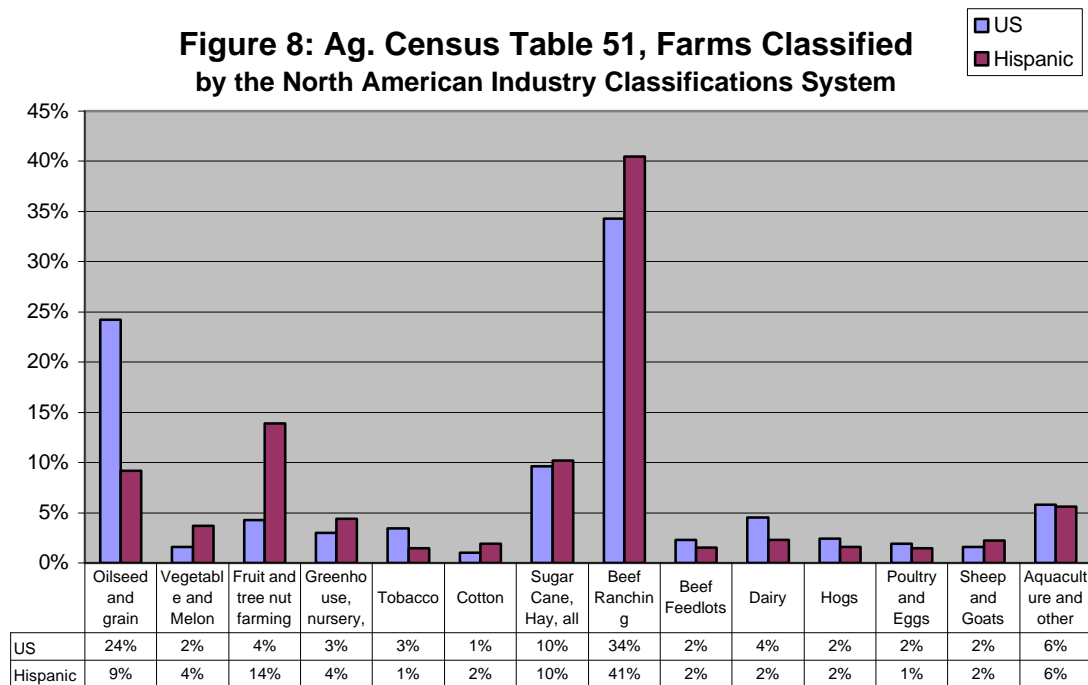
Years	Hispanic Operators			All Operators			Hispanic Operators as % of All Farms
	1982	1997	% Change between 1997&1992	1982	1997	% Change between 1997&1992	
2 or less	1,588	2,085	+31%	127,176	92,574	-27%	2.3%
3 - 4	2,079	2,759	+33%	192,714	126,791	-34%	2.2%
5 - 9	3,394	4,933	+45%	360,458	263,642	-27%	1.9%
10 or more	6,644	14,348	+116%	1,097,660	1,113,839	1%	1.3%
Total	13,705	24,125	+ 76%	1,778,008	1,596,846	-10%	1.5%

Land ownership: Land owned by Hispanic operators accounted for 64 percent of the total land they operated in 1997, a 10-percent increase from 1992 (Figure 7) and 5 percent higher than the corresponding share for U.S. farms. Hispanic land ownership rose from 4,467,647 acres to 10,461,612 acres between 1987 and 1997, a 134% increase, while the acres of non-Hispanic farmer-owned land declined.

Figure 7: Operator-Owned Land as % of total Land Operated

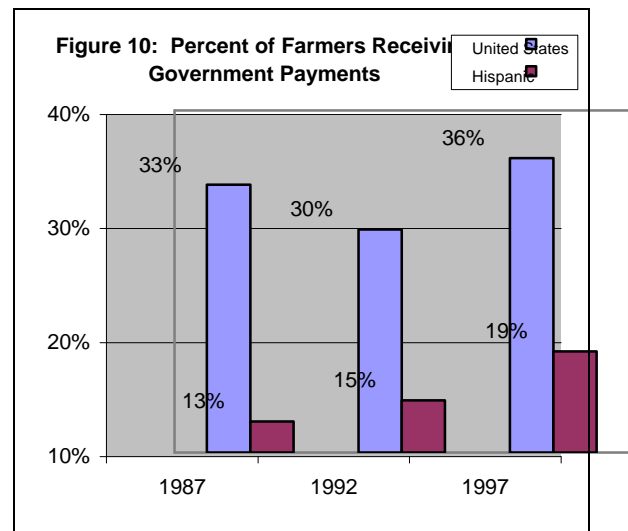
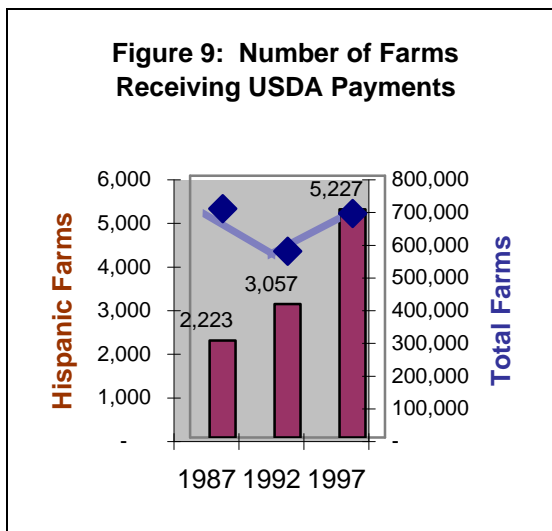


Type of Farms: Figure 8 displays that 41 percent of Hispanics specialized in beef ranching, which was slightly higher than that of the U.S. (34 percent.) The share of high-value specialty crops, such as fruit, tree nuts, greenhouse, nursery, or vegetable and melons, was more than twice among Hispanics (a total of 22 percent) than the corresponding 9 percent for U.S. farms. This may help explain the relatively high sales per farm for Hispanics. However, only a total of 12 percent of Hispanics had traditional commodity crops, such as oilseed and grain, cotton, and tobacco, compared with 28 percent among U.S. farms. That explains much of their low USDA program participation.



USDA programs and payments: In the Agricultural Census, there is a question asking about the CCC loan program, and another for all other USDA payments. Recently they added a third question asking for the total of CRP and WRP payments received in 1997. The Commodity Credit Corporation (CCC) provides regular and emergency reserve loans using specific crops (grain, cotton, tobacco, and peanuts) as collateral. Only 12% of Hispanic farms primarily grow these crops, compared with 28% of all US farmers (see figure 8). As a result, only 2 percent of Hispanic farms received CCC loans in 1997, compared with 4 percent for U.S. farms. The average CCC loan per participating farm was \$32,307 for the Hispanics, compared with \$36,419 for all U.S. farms.

The number of Hispanic farms receiving USDA payments in 1997 was compared with the number in 1987 (Figure 9.) Although the participation rates of government farm programs for Hispanic farms increased from 13 percent in 1987 to 19 percent in 1997, that is only half of the U.S. participation rate (see Figure 10.) However, the Hispanic farms that did participate in USDA programs received about the same average government payment per farm as non-Hispanic farms (\$7,400 and \$7,378, respectively.)



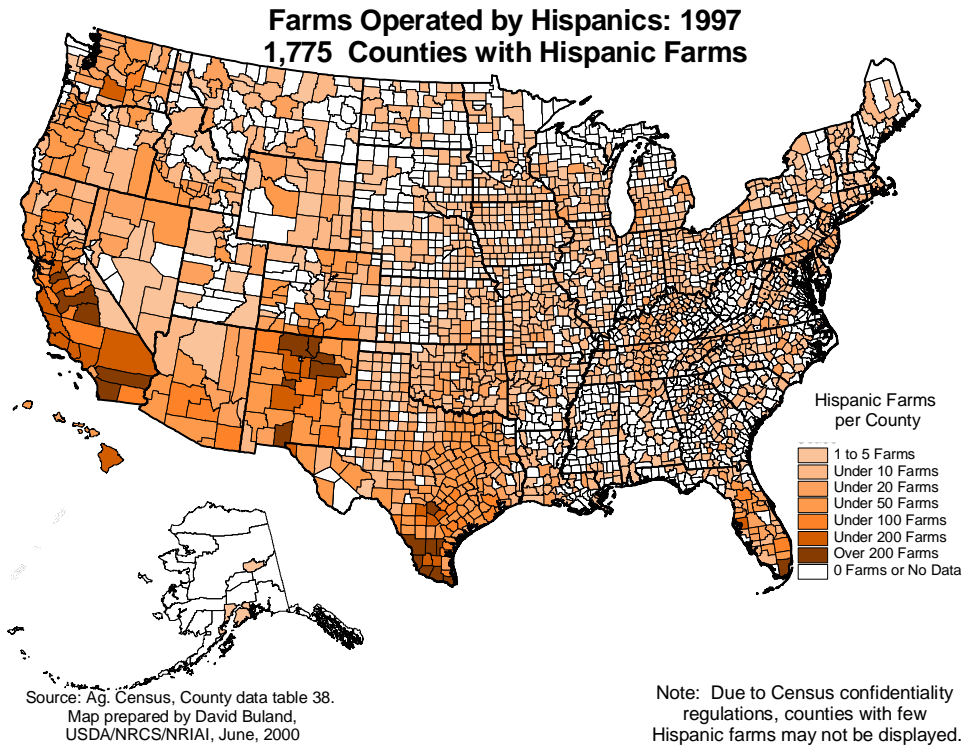
III. Differences among Regions and Pre- and Post-Immigration Reform and Control Act (IRCA)

Historically, Hispanic farms were concentrated in a few “Gateway” states. In 1982 and still in 1987, 80% of Hispanics were concentrated in the border/coastal states from Texas to Washington, plus Colorado and Florida (Figure 11: Farms Operated by Hispanics, 1982.) However, in the 1990s, the number of Hispanic farms outside this border region increased much faster than other minority farms, and the geographic distribution of Hispanic farms transformed from a regional to a national phenomenon (Figure 12: Farms Operated by Hispanics, 1997.)

Of 3,128 counties in the 50 States, 589 counties (19%) had Hispanic farm operators in 1982. In 1987, the number increased to 713 counties (23%), in 1992, 925 counties (30%), and by 1997, Hispanic farm operators had spread across the nation to 1,775 counties (57%). This calculation uses the PUBLISHED 1997 Ag. Census, which may zero out counts if there are less than three Hispanics in a county

Figures 13 and 14: Acres of Hispanic Operated Farms, 1982 and 1997, respectively, also verify this expansion of Hispanic operated farmland across the entire country. There are some counties in Figures 11 through 16, which do not show Hispanic operated land but do have Hispanic farmers. This is due to confidentiality restrictions in the Census, particularly if the county has less than five Hispanic farms, one oversized farm, or is needed to hide the numbers from another such county. When working with the information from Census, often the state level data is higher than adding all data from the counties, and occasionally the national data is greater than adding all data from the 50 states due to confidentiality restrictions at the local level. This year, the Census is providing exact counts of the number of Hispanic farms in each county, but not on the acreage or some other economic data, should there be any possibility that the analysis of the data could provide details on individual farms.

Figure 11



Figure

12

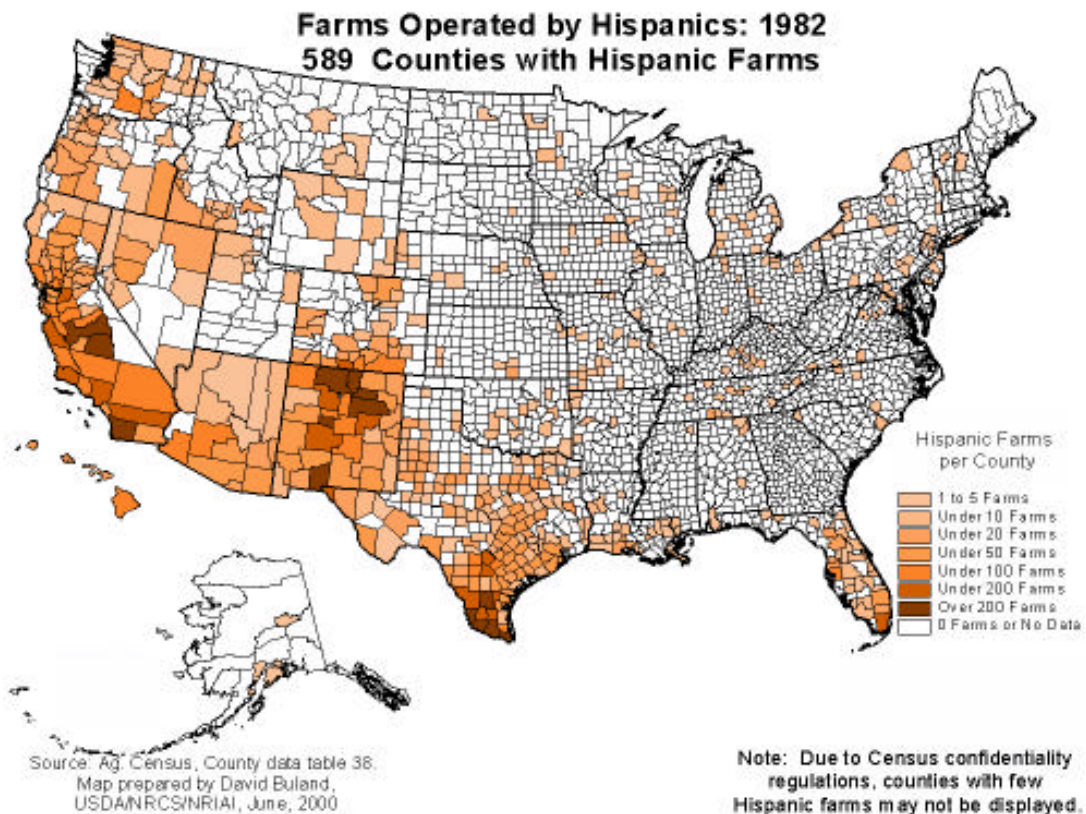


Figure 13

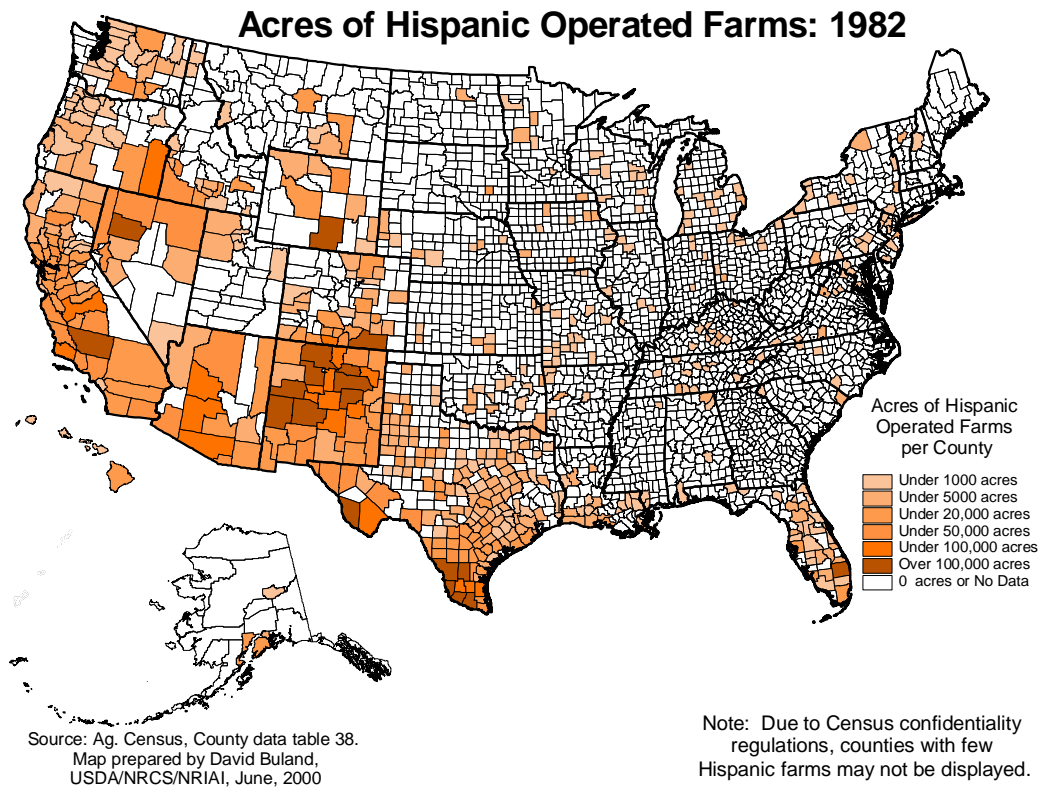


Figure 14

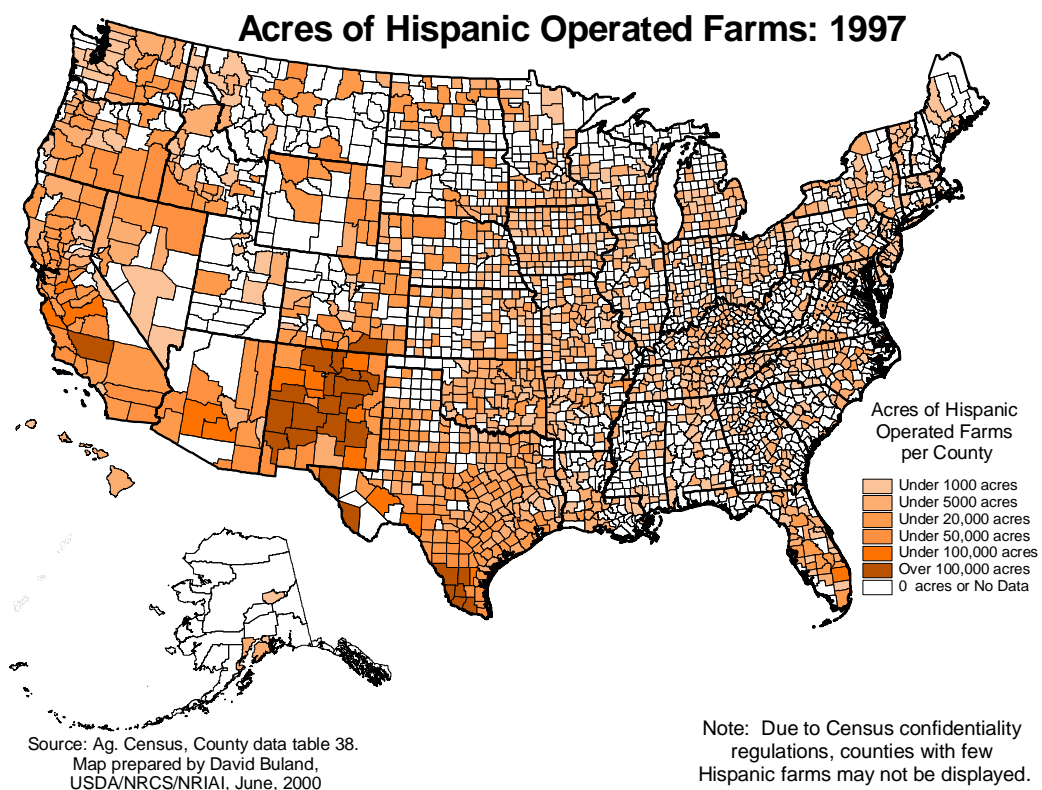
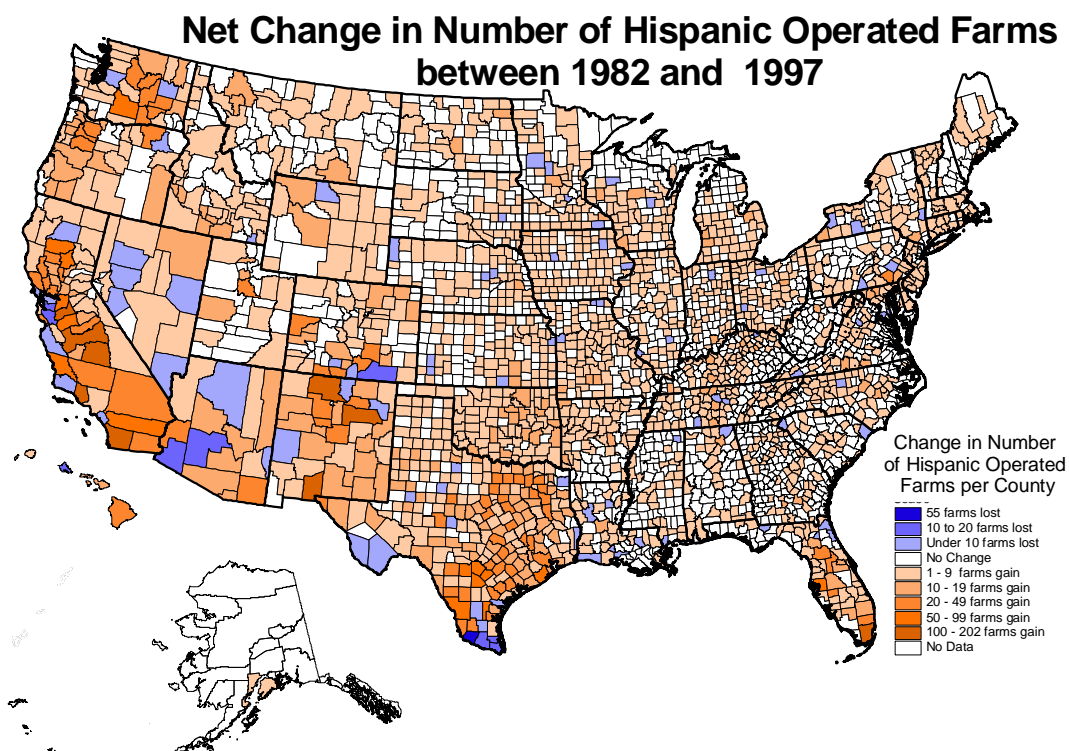


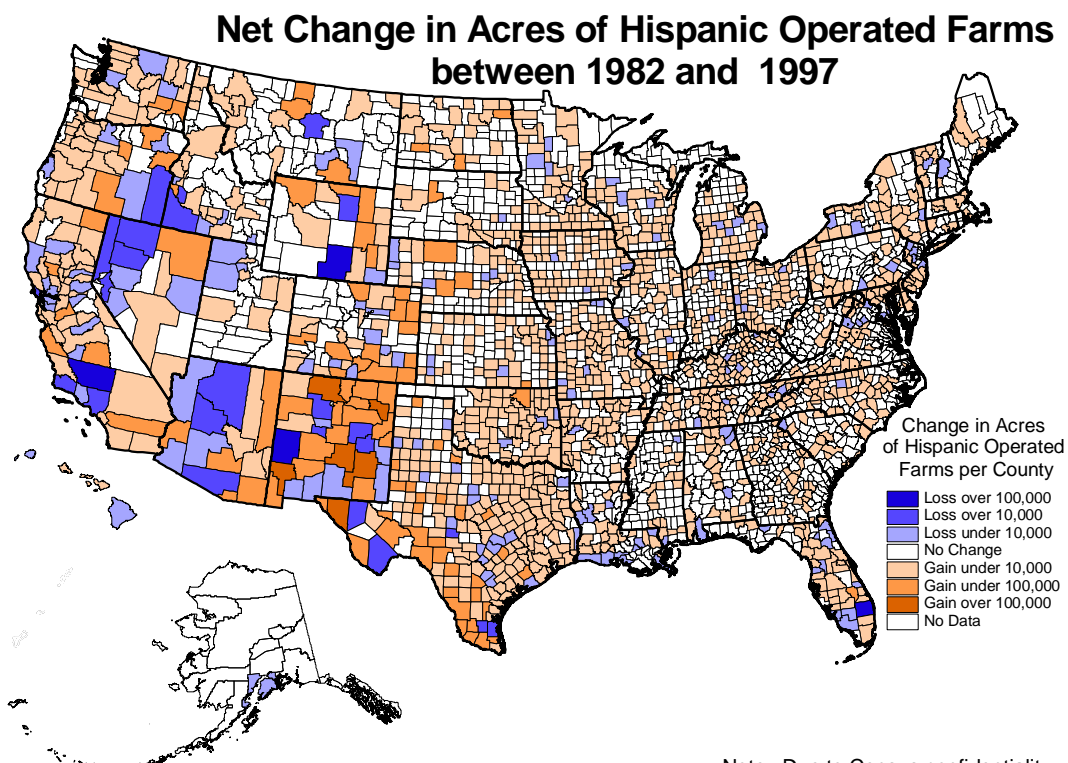
Figure 15



Source: Ag. Census, County data table 38.
Map prepared by David Buland,
USDA/NRCS/NRIAI, June, 2000

Note: Due to Census confidentiality regulations, counties with few Hispanic farms may not be displayed.

Figure 16



Source: Ag. Census, County data table 38.
Map prepared by David Buland,
USDA/NRCS/NRIAI, June, 2000

Note: Due to Census confidentiality regulations, counties with few Hispanic farms may not be displayed.

Figure 15 shows the net change in Hispanic Farms by county between 1982 and 1997. Figure 16 shows the net change in farmland operated by Hispanics from 1982 to 1997. The percentage change in acreage is even greater than the change in number of farms, and more regionally noticeable.

One explanation for this change is the Immigration Reform and Control Act (IRCA) of 1986, which grants amnesty to undocumented workers who had been living in the U.S. since 1982. Traditionally, the agricultural sector relies heavily on migrant and seasonal workers, especially from Mexico. Some might have stayed in the country illegally. IRCA of 1986 allowed them to legalize their status. Once they established their permanent residence, not only would they come out from hiding and be accounted for in the Census, but also they could move around the country where they could purchase land and apply their farming skills. This helps explain the recent increase in Hispanic-owned farmland.

In addition to the amnesty provision, IRCA has two other sets of provisions that are specifically for agriculture. One is the Special Agricultural Worker (SAW) Provision, which allows farm workers, who worked a minimum of 90 days in perishable crops during 1985, a chance to legalize their status under SAW. That in turn provides an opportunity for them to become permanent U.S. residence. The other is the Replenishment Agriculture Workers (RAW) Provision that took effect in 1990. RAW assures the agricultural sector to continue draw alien workers in case the SAWs decide to leave farm work. In the long run, we envision that these two provisions will facilitate to have even more Hispanics in the agricultural sector.

Table 3 shows some data of Hispanic Farm Growth between the Pre and Post IRCA Era. During the 1982 to 1987 pre-IRCA period, 80% of the Hispanics lived in eight gateway states. These 'gateway' states included the six states along the Mexican border and the Pacific coast, Colorado, and Florida. Hispanics have long used the Rio Grande valley and later I-25 to travel through New Mexico to Colorado and have farmed there since Spanish colonial times. Florida was colonized by the Spanish in the 1500s, and still receives waves of immigration from Cuba and other Latin American counties. From 1982 to 1987, ALL of the net increase in Hispanic farms was in these eight states, increasing their percentage of Hispanic farms from 79% to 81%. The number of Hispanic farms in the other 42 states actually went down during those five years. The land owned by Hispanics in both gateway and non-gateway states declined slightly in this time period. Figures 17 and 19 show the growth in Hispanic farms and land by state in this Pre-IRCA Era.

But in the Post-IRCA Era, from 1992 to 1997, most (54%) of the increase in Hispanic farms went to the other 42 states. The number of Hispanic farms in these 42 non-gateway states increased 154% in the ten years between 1987 and 1997; compared with only a 36% increase in the eight gateway states. Land operated by Hispanics increased by the by 154% in the 42 non-border states. In the border states, only Arizona had a significant increase in Hispanic operated farmland. Figures 18 and 20 reveal these significant changes for both farms and land in the Post-IRCA Era.

Table 3, Hispanic Farm Growth between the Pre and Post IRCA Era

YEAR	Number of Hispanic Farms				Acres in Hispanic Farms			
	Pre-IRCA Era		Post-IRCA Era		Pre-IRCA Era		Post-IRCA Era	
	1982	1987	1992	1997	1982	1987	1992	1997
The Eight Gateway States								
TX	5,197	5,427	6,122	7,798	2326710	2444808	3516492	4039351
CA	3,031	3,471	3,883	4,515	1107010	1046104	1220659	1006166
NM	2,728	3,013	3,363	3,477	2759721	2540060	3311319	3716427
CO	632	710	853	945	385076	402040	604464	631049
FL	471	624	928	1,060	283397	205542	405262	226997
AZ	299	363	380	402	322266	364077	617880	2788999
WA	259	325	378	625	73134	61016	87786	130492
OR	209	238	306	511	109164	146650	177871	187245
Totals	12,826	14,171	16,213	19,333	7,366,478	7,210,297	9,941,733	12,726,726
% of Total	79%	81%	77%	70%	83%	83%	80%	78%
Increase		1,345		3,120		(156,181)		2,784,993
The Other 42 States								
AK	5	5	5	6	5792	5969	1532	1861
AL	79	83	107	186	13437	11382	19173	40457
AR	92	75	131	299	17652	13969	26951	92807
CT	7	12	12	28	1515	1341	0	2209
DE	3	9	13	13	451	2450	1038	1745
GA	96	73	107	312	16091	12085	24846	57017
HI	125	110	154	176	8302	21738	63809	8049
IA	138	105	187	343	42269	33851	67935	125106
ID	150	174	282	328	119169	171165	98523	171165
IL	119	159	175	289	33179	50324	67413	113343
IN	117	99	127	232	24469	18643	35422	67245
KS	113	108	154	332	50850	55373	107279	258583
KY	176	143	207	405	29015	20061	26804	65492
LA	176	137	202	214	51191	42192	70565	62692
MA	13	24	31	37	1428	2019	1613	4293
MD	32	41	48	85	3780	6032	4747	8796
ME	10	16	9	36	3104	4676	706	7740
MI	116	122	186	280	14496	17323	35043	57621
MN	117	104	141	260	34942	29622	56729	97572
MO	152	197	266	444	33995	47912	80489	130454
MS	83	48	102	149	27791	12646	36333	52296
MT	46	42	90	173	57213	56110	214412	380653
NC	102	57	131	320	13221	6290	21938	74762
ND	38	30	66	145	52935	24004	93719	169142
NE	111	80	114	254	80742	48458	79618	230327
NH	7	9	14	15	985	1984	1839	1701
NJ	37	29	69	112	4562	2434	4567	6718
NV	79	89	86	108	219601	83411	427088	83411
NY	103	93	105	210	16801	16448	23329	45090
OH	119	167	168	306	19689	25217	33130	59380
OK	128	143	270	551	41788	41560	91203	194187
PA	73	103	105	215	12200	15520	22992	30098
RI	4	2	2	7	410	0	0	348
SC	53	23	63	107	8657	0	10945	29068
SD	39	32	66	168	60197	42858	123505	222406
TN	168	147	198	375	22070	27169	30408	60847
UT	43	49	77	120	12764	8792	22347	77505
VA	82	81	152	233	10920	14918	31670	57770
VT	13	24	27	45	3349	5479	4648	9669
WI	108	158	148	251	20248	33016	34577	64102
WV	25	31	49	84	4420	6006	8930	15587
WY	60	72	97	131	309898	440079	344696	440079
Totals	3,357	3,305	4,743	8,384	1,505,588	1,480,526	2,452,511	3,679,393
Percent of Total	21%	19%	23%	30%	17%	17%	20%	22%
Increase		(52)		3,641		(25,062)		1,226,882
National Total	16,183	17,476	20,956	27,717	8,872,066	8,690,823	12,394,244	16,406,119
Increase		1,293		6,761		(181,243)		4,011,875
		8%	20%	32%		(2%)	43%	32%

Figures 17 and 19 show the growth in Hispanic farms and land in the Pre-IRCA Era.
Figures 18 and 20 show the growth in Hispanic farms and land in the Post-IRCA Era.

Figure 17

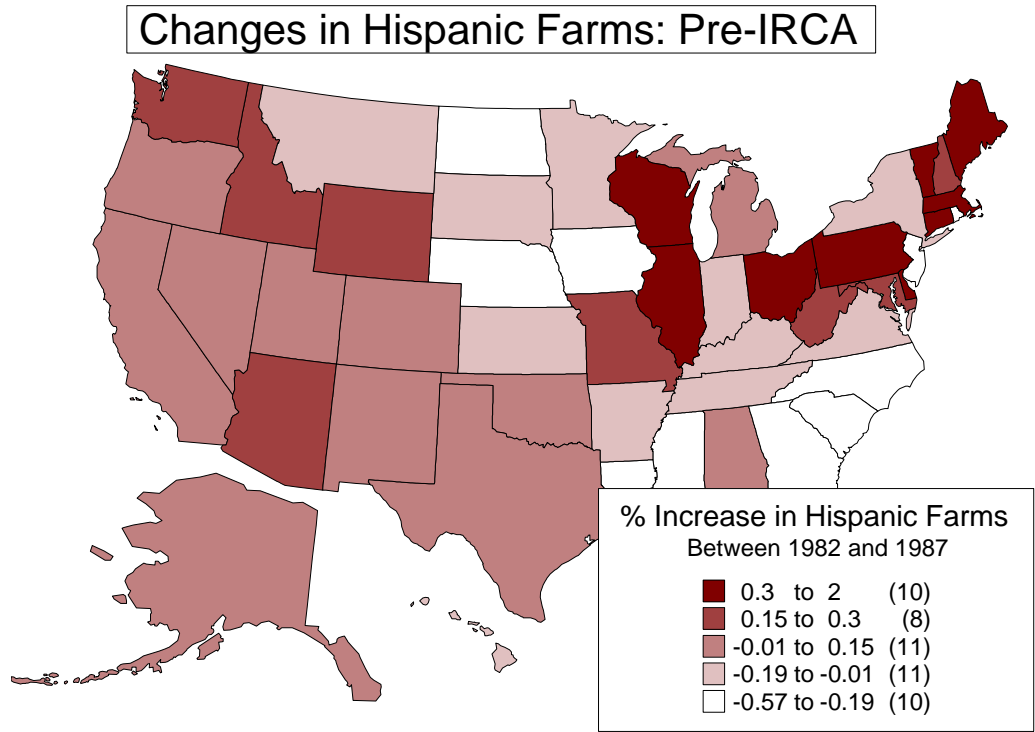
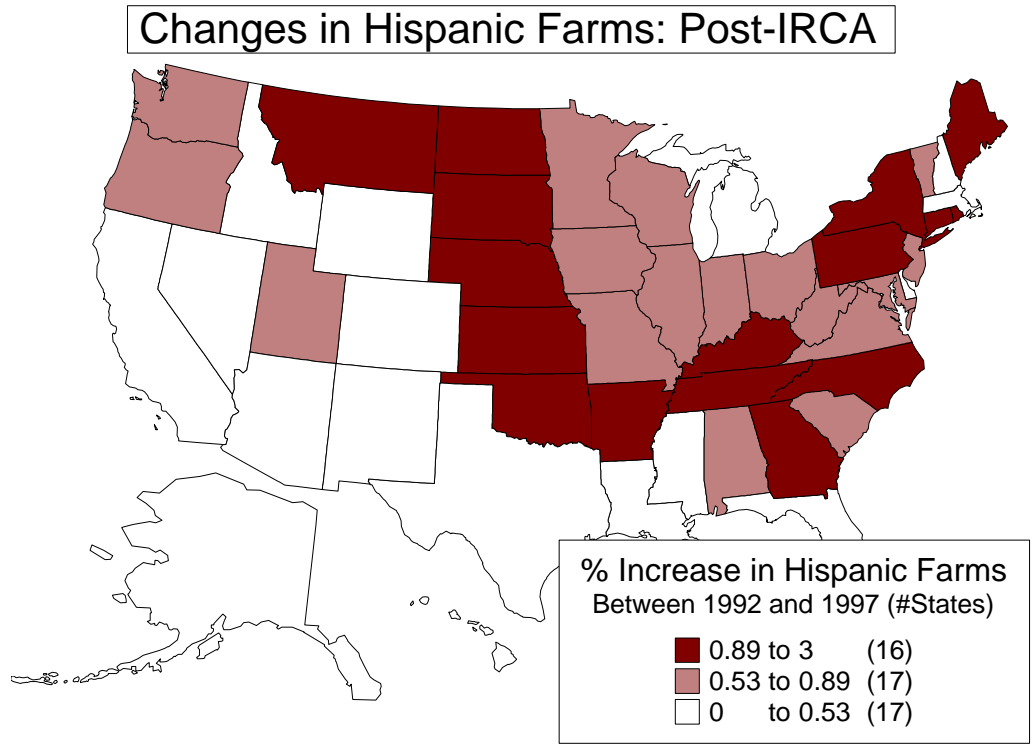


Figure 18



Figures 17 and 19 show the growth in Hispanic farms and land in the Pre-IRCA Era.
 Figures 18 and 20 show the growth in Hispanic farms and land in the Post-IRCA Era.

Figure 19

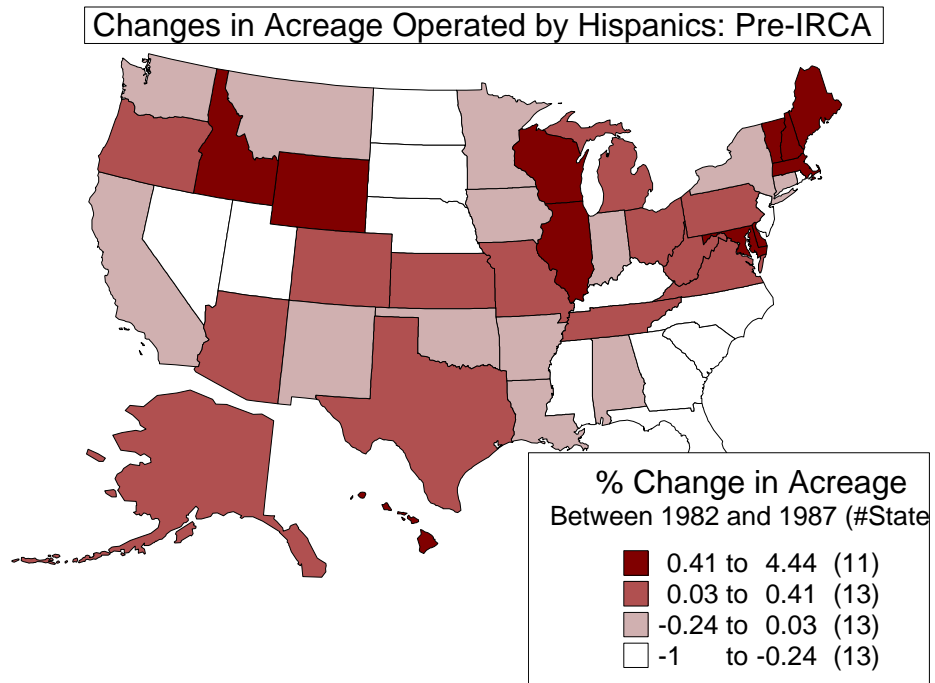
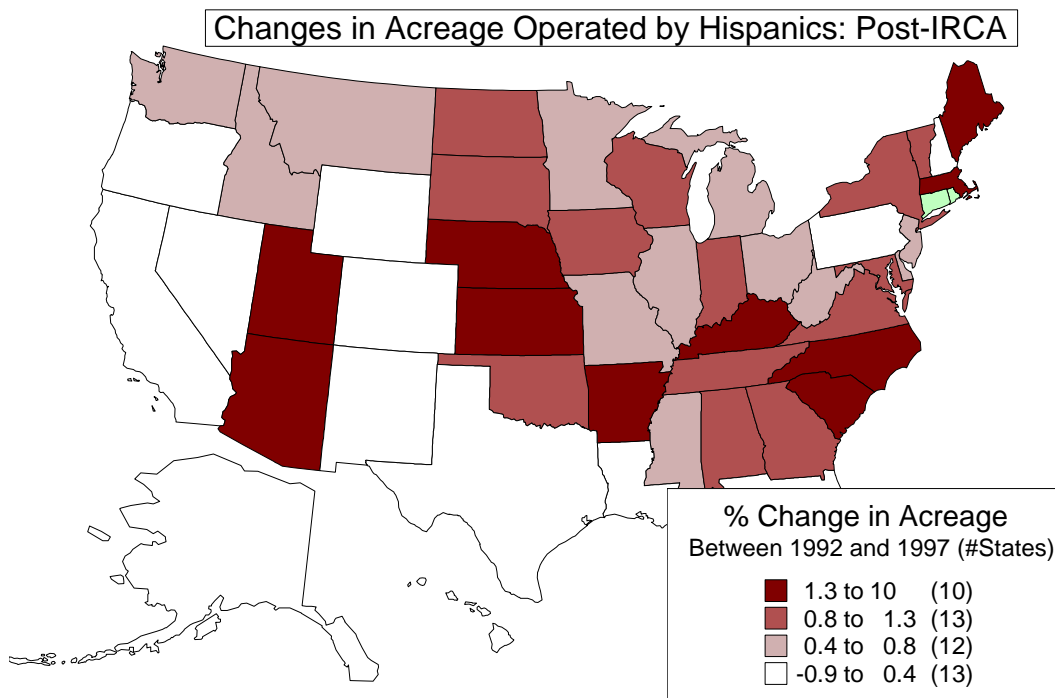


Figure 20



IV. Opportunities for Natural Resources Conservation

To meet the requirements of the Government Performance Reform Act, NRCS established the performance tracking system called PRMS. This system is designed to capture the status of conservation assistance that the agency provides. Included in the system is the information of the client's race or ethnicity. In fiscal year (FY) 1999, PRMS was launched on a trial basis. However, FY 1999 data were incomplete since not all field offices recorded their activities in the system. In FY 2000, all States have documented their services and activities in the system. Current reports generated from PRMS for FY2000 are mostly complete. We believe that FY 2001 will be even better.

Table 4 is based on the NRCS FY2000 PRMS First Time Customer Parity Report data. The second column in Table 4 shows the number of Hispanic farm operators assisted by NRCS in FY 2000. NRCS has provided assistance to 17,379 Hispanic farm operators, which account for about 37 percent of all potential Hispanic clients (the third column, using the 1997 Census data.) A parity difference indicates that on average, the rate of assistance provided to Hispanic farmers is about 15 percent lower than that to the more traditional clients, i.e., white, male Anglos. The baseline for the parity calculations is 64.2%, the percentage of white, male Anglos served in FY2000.

Currently, NRCS service to Hispanics exceeds the assistance rate of traditional clients in ten states: Arizona, California, Colorado, Florida, Hawaii, Massachusetts, New Mexico, Ohio, Rhode Island, and Texas (Figure 23). This data is only valid for the 50 states, data for Puerto Rico and other US territories are included, but can not be directly compared. At the request of the Commonwealth of Puerto Rico, the 1998 Agricultural Census for Puerto Rico does not include any baseline data on race or Hispanic origin. This information may not be relevant within Puerto Rico. However, only 24% of all farmers in Puerto Rico were served by NRCS this year, well below the national average of 64%.

In using the PRMS data, we would like to point out that the system is still fairly new that may require modifications or further clarifications to ensure consistency in data collections. In addition, there is the data compatibility issue between Hispanic clients served and the number of potential Hispanic clients from Census. Until we can address these concerns, the parity difference may not necessarily be valid and comparable for all States.

Despite these concerns, a quick glance at Figures 21 and 22 shows definite opportunities for NRCS to increase assistance to Hispanic farmers, especially, since the post-IRCA era when Hispanic farmers' spreading across the nation happens to be consistent with the post-1985 Food Security Act (FSA) era. Since 1985, USDA has been providing financial incentives through conservation programs to promote land stewardship. Although the share of Hispanics participating in conservation programs remains to be low for various reasons, it is increasing. How we can take the opportunity to develop outreach strategies and program policies to further increase their participation?

Table 4 NRCS Parity Report FY2000

STATE	Hispanic Clients Served	Ag Census	Percent Clients Served	Parity Difference
Alabama	81	186	43.5%	(33.2)
Alaska	5	6	83.3%	(11.0)
American Samoa	0	0	0.0%	0.0
Arizona	156	402	38.8%	12.1
Arkansas	60	299	20.1%	(35.1)
California	1085	4515	24.0%	9.3
Colorado	736	945	77.9%	25.7
Connecticut	3	28	10.7%	(10.0)
Delaware	3	13	23.1%	(69.2)
District of Columbia	0	0	0.0%	0.0
Federated States of Micronesia	0	0	0.0%	(0.0)
Florida	249	1060	23.5%	1.6
Georgia	73	312	23.4%	(24.5)
Guam	1	1	100.0%	98.3
Hawaii	95	176	54.0%	37.5
Idaho	61	328	18.6%	(19.2)
Illinois	101	289	34.9%	(76.7)
Indiana	80	232	34.5%	(29.4)
Iowa	86	343	25.1%	(90.7)
Kansas	76	332	22.9%	(68.6)
Kentucky	51	405	12.6%	(44.2)
Louisiana	74	214	34.6%	(29.0)
Maine	24	36	66.7%	(19.9)
Marshall Islands	0	0	0.0%	0.0
Maryland	9	85	10.6%	(56.2)
Massachusetts	119	37	321.6%	291.6
Michigan	136	280	48.6%	(8.4)
Minnesota	80	260	30.8%	(93.3)
Mississippi	36	149	24.2%	(40.3)
Missouri	93	444	20.9%	(33.2)
Montana	30	173	17.3%	(34.1)
Nebraska	19	254	7.5%	(81.9)
Nevada	21	108	19.4%	(62.8)
New Hampshire	6	15	40.0%	(5.9)
New Jersey	6	112	5.4%	(15.6)
New Mexico	1703	3477	49.0%	8.9
New York	40	210	19.0%	(26.2)
North Carolina	41	320	12.8%	(42.0)
North Dakota	19	145	13.1%	(75.7)
Northern Mariana Islands	1	0	0.0%	(300.0)
Ohio	322	306	105.2%	11.8
Oklahoma	107	551	19.4%	(19.5)
Oregon	101	511	19.8%	(4.0)
Palau	0	0	0.0%	0.0
Pennsylvania	87	215	40.5%	(30.8)
Puerto Rico	4724	19728	23.9%	23.7
Rhode Island	11	7	157.1%	137.7
South Carolina	35	107	32.7%	(42.9)
South Dakota	10	168	6.0%	(78.2)
Tennessee	81	375	21.6%	(16.1)
Texas	6058	7798	77.7%	34.8
Utah	26	120	21.7%	(7.4)
Vermont	8	45	17.8%	(29.0)
Virgin Islands of the U.S.	11	25	44.0%	43.7
Virginia	62	233	26.6%	(13.2)
Washington	179	625	28.6%	(16.8)
West Virginia	34	84	40.5%	(52.6)
Wisconsin	36	251	14.3%	(58.7)
Wyoming	28	131	21.4%	(17.9)
Totals	17379	47471	36.6%	(27.6)

Figure21

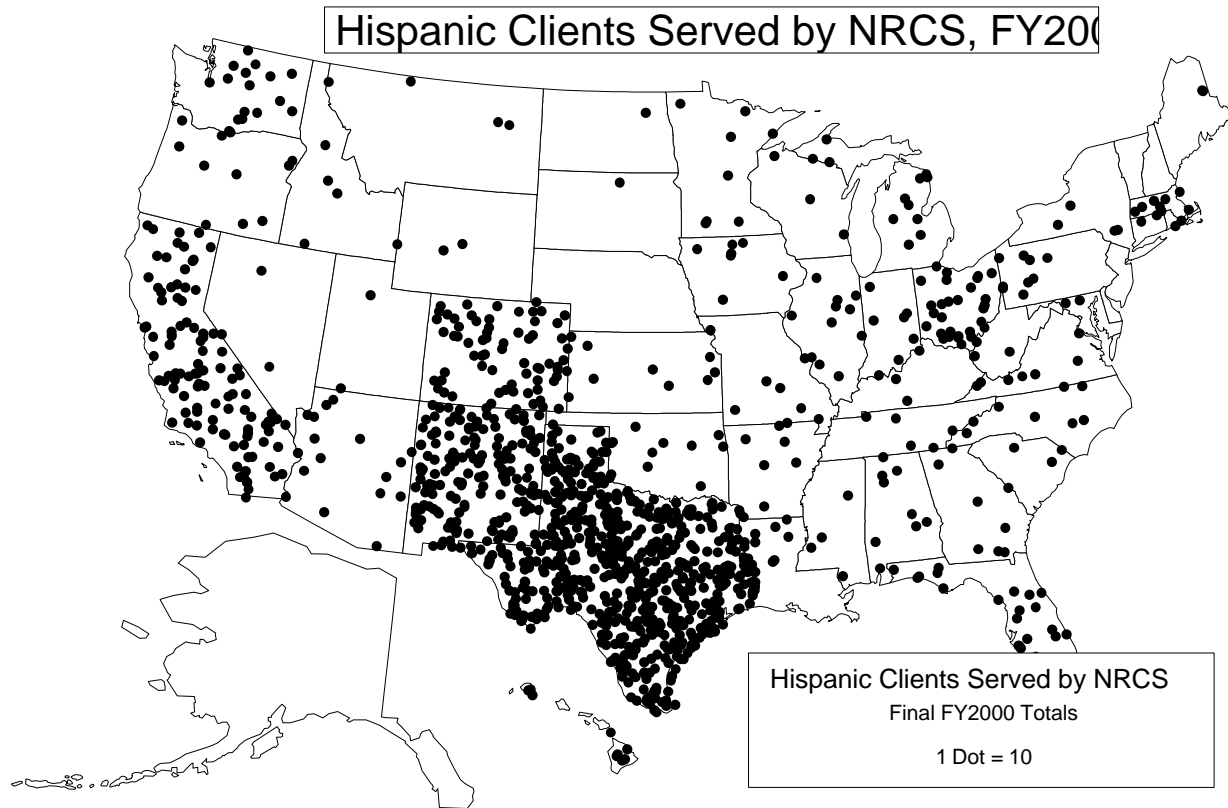


Figure 22

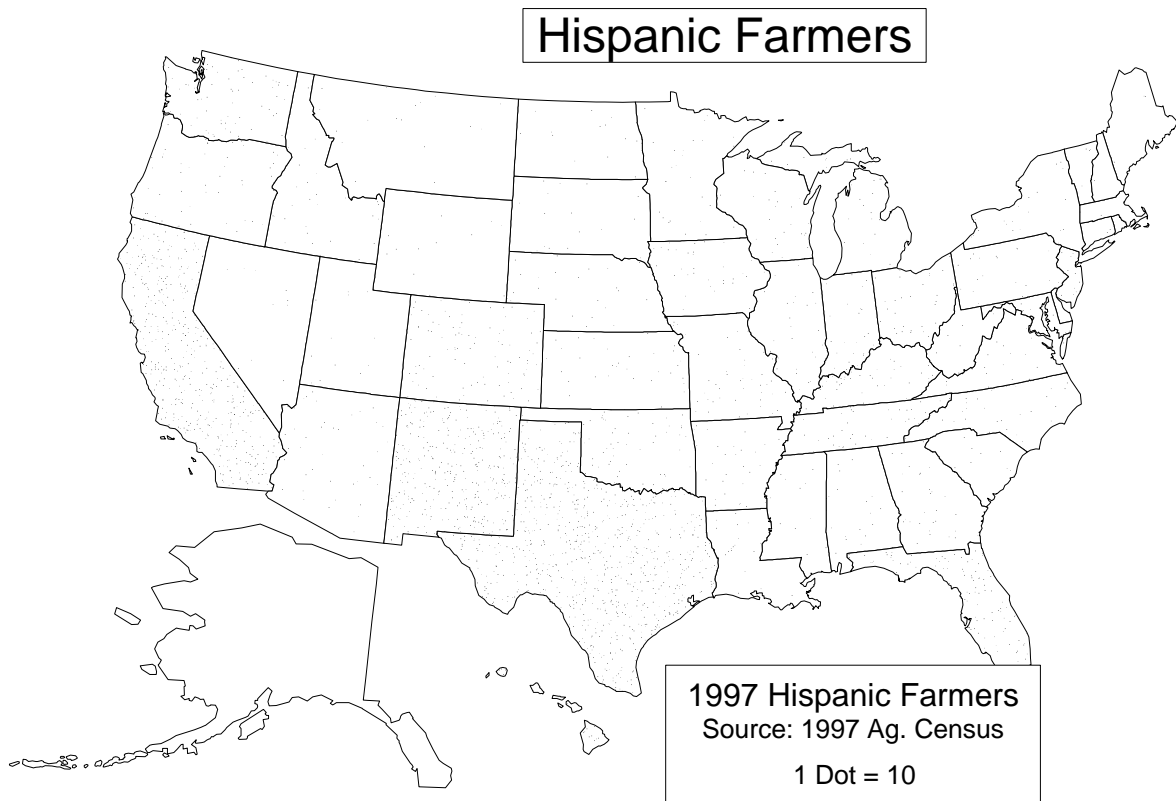
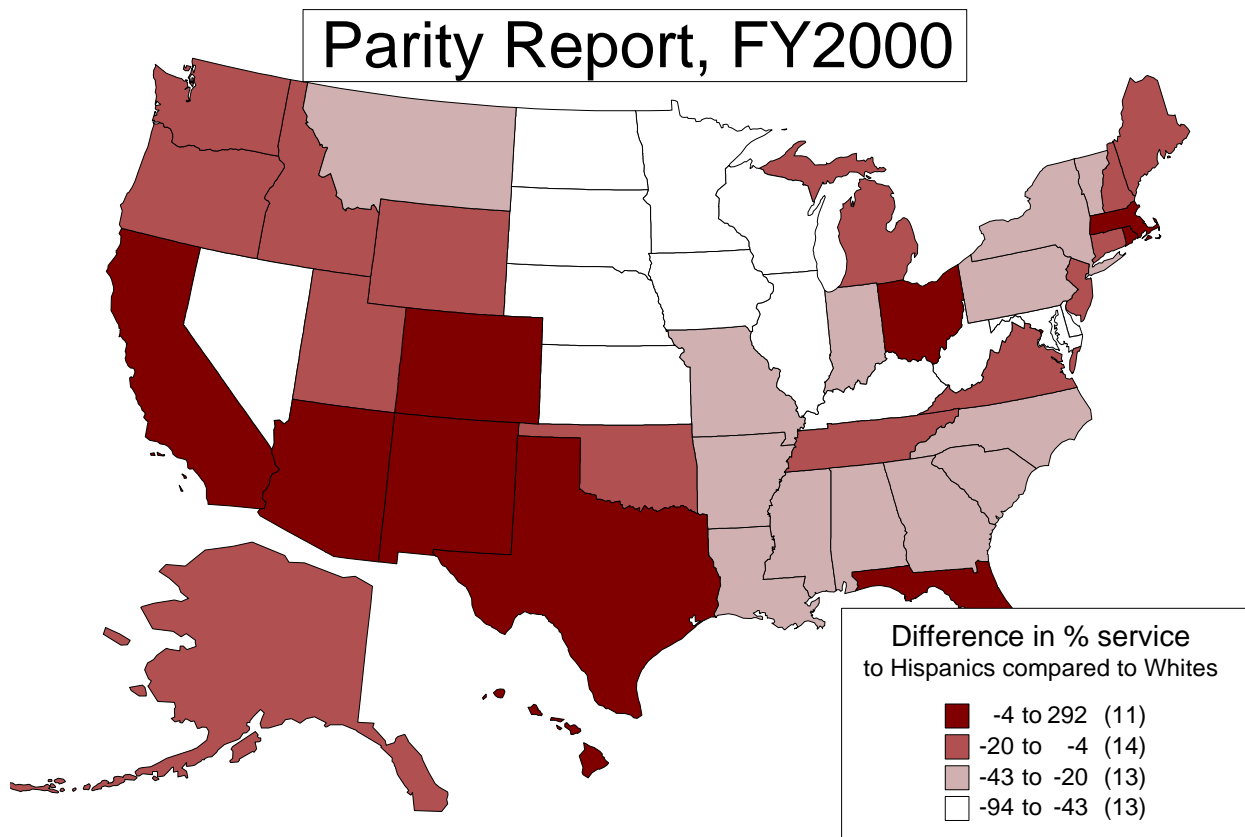


Figure 23



IV. Summary

NRCS provides technical assistance to help landowners address their resource concerns. To be effective in delivering the assistance, we have to understand the client's needs and concerns, especially those that are traditionally underserved. This paper addresses some general characteristics of the Hispanic farmers and the new trend of their geographic distributions. From the discussion above, we know that Hispanic operated farms are spreading across the nation while the overall number of U.S. farms is declining. There is certainly a window of opportunities for NRCS to increase the technical assistance and provide financial incentives to promote land stewardship among this group, especially those areas that have recently received the new wave of Hispanic farm operators. NRCS is meeting this goal in the areas that traditionally have had Hispanic farms, but not in the regions of the country that are only now receiving large numbers of Hispanic farm owners and operators. In order for NRCS to facilitate and implement conservation practices within this group, strategies and policies must not only incorporate their physical resources, farming operations, and socio-economic conditions, but also address their cultural factors that may limit the ability or willingness to embrace conservation practices.

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